USCMS Engineer Status Report for March 2004

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1 Work Performed This Month

OSCAR/Mantis development, maintenance and testing:
    - OSCAR/G4 testing and debugging following release of OSCAR_3_0_2 based on Geant4 6.0 major release end February 2004
    - OSCAR performance studies for Heavy Ion simulation
    OSCAR developer and user support

2 Status of Deliverables

- robustness and performance studies with OSCAR/G4 6.0 cancelled due to major bug in G4 6.0 muon physics as well as OSCAR/Mantis problems (Mantis underwent significant design revision earlier in the year) encountered during OSCAR_3_0_x testing

3 Plans For Next Month

- update to and test OSCAR for Geant4 release 6.1
    - prepare baseline release for OSCAR with G4 6.1
    - test release in terms of robustness and performance
    - start implementation of outstanding requirements: random number storage and retrieval, user stacking action, transient access to OSCAR/G4 hits, storage and retrieval of cross-section tables, user access to G4 tracking and stepping managers

4   Longer Term Plans

- continue implementation and testing of new OSCAR/Mantis functionality, update and test following G4 evolution and the release of new CMS geometry and magnetic field packages - prepare new production release candidate (to be used for Physics TDR and DC05 productions) for full-scale PRS validation

5   Resources Needed

no estimate at this point

6   Links To Supporting Documentation

- OSCAR main page: http://cmsdoc.cern.ch/oscar/

- OSCAR release tables and release notes in http://cmsdoc.cern.ch/oscar/

- OSCAR task list in http://cmsdoc.cern.ch/oscar/

- OSCAR Savannah entries: https://savannah.cern.ch/projects/oscar/

- OSCAR mail archive: https://wwwlistbox.cern.ch/earchive/cms-oscar-developers/

- SPROM presentations: http://cmsdoc.cern.ch/swsi/agendas.html

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